UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

SEP 19 2001

4WD-RCRA

Gary Weinreich
Environmental Services Manager
BMW Manufacturing Corporation
P.O. Box 11000
Spartanburg, SC 29304-4100

SUBJ: RCRA Compliance Evaluation Inspection
BMW Manufacturing Corporation

EPA I.D. Number: SC0 000 110 288

Dear Mr. Weinreich:

On July 23-24, 2001, Larry Lamberth and Alan Newman of the U.S. Environmental Protection Agency (EPA) and Cindy Carter, Clyde Buchanan, and Robert Lee of the South Carolina Department of Health and Environmental Control (SCDHEC) conducted a hazardous waste management inspection at the BMW Manufacturing Corporation (BMW) facility located in Greer, South Carolina. The purpose of the inspection was to determine the compliance status of this facility with the Resource Conservation and Recovery Act (RCRA) and corresponding SCDHEC requirements. The enclosed report details violations of RCRA. BMW should correct these violations upon receipt of this inspection report. A copy of this report has been forwarded to SCDHEC.

This inspection report includes photographs taken during the inspection. Although the photographs were taken with the intention of not including production equipment, pursuant to 40 C.F.R. Part 2, BMW may make a confidentiality claim on the photographs taken during the inspection. However, pursuant to 40 C.F.R. § 2.208(e), BMW bears the burden of substantiating the confidentiality of the photographs. This claim must be made in accordance with 40 C.F.R. Part 2 and certain steps must be taken by BMW to substantiate this claim. The claim must be postmarked or hand delivered to the following address by the 15th working day after your receipt of this letter:

Attention:
Phyllis Harris, Regional Counsel
Environmental Accountability Division
U.S. EPA - Region 4
Sam Nunn Atlanta Federal Center

61 Forsyth Street, S.W.
Atlanta, Georgia 30303

If you should have any questions regarding this inspection report or wish to pursue a confidentiality claim on the photographs included in the inspection report, please contact Larry Lamberth, at (404) 562-8590.

Sincerely,

Kenneth R. Lapierre, Chief
North Enforcement and Compliance Section
RCRA Enforcement and Compliance Branch

Enclosure

cc: Cindy Mason, SCDHEC
Clyde Buchanan, SCDHEC
Robert Lee, SCDHEC

RCRA Inspection Report

1. Inspector and Author of Report

Larry L. Lamberth
Environmental Engineer

2. Facility Information

BMW Manufacturing Corporation
1400 Highway 101 South
Greer, SC 29651

Mailing Address:

P.O. Box 11000
Spartanburg, SC 29304-4100

EPA I.D. No: SC0 000 110 288

3. Responsible Official

Gary N. Weinreich, P.E.
Manager, Environmental Services

4. RCRA Inspection Participants

Gary N. Weinreich - BMW
George E. Tucker - BMW
Maresa Williamson - BMW
Mike O'Steen - Waste Management of SC
John Munin - Waste Management of SC
Cindy Mason Carter - SCDHEC - App. III
Clyde A. Buchanan - SCDHEC - Columbia
Robert Lee - SCDHEC - Columbia
Alan Newman - US EPA - Atlanta
Larry Lamberth - US EPA - Atlanta

5. Dates of Inspection

July 23-24, 2001

6. Applicable Regulations

RCRA Sections 3005 and 3007
40 C.F.R. Parts 260-279
South Carolina Hazardous Waste Management Regulations (SCHWMR) R.61-79.260-279.

7. Purpose of the Inspection

The purpose of the inspection was to determine the compliance status of BMW Manufacturing Corporation (BMW) with the Resource Conservation and Recovery Act (RCRA) and the corresponding South Carolina Department of Health and Environmental Control (SCDHEC) regulations.

8. Facility Description

At this facility, BMW assembles a two door roadster (Z-3) and a sport utility vehicle (X-5). The facility, which is approximately 1.2 million square feet, began operations in July, 1994.

On each vehicle, BMW applies four coatings. Following a phosphate treatment, the car frame is dipped into an electro-deposition coating (e-coat), then a primer is applied, followed by a base coat, then a clear coat. BMW uses one paint mix room to distribute primer, paint, clear coat, and purge solvent. Hazardous waste purge solvent is collected and stored in containers in the Paint Building, then moved to the 90-day Hazardous Waste Storage Area.

Hazardous waste streams from this facility include e-coat filters (lead - D008), waste purge solvent and other solvents (D001, F003, F005). BMW is a large quantity generator of hazardous waste.

9. Inspection Findings

The inspection began with an opening conference at 10:00 a.m. on July 23, 2001. Credentials were presented and the purpose of the inspection was stated. The inspection lasted two days and a closing conference was held on July 24, 2001. The following areas were inspected and deficiencies noted:

A. 90-Day Storage Area:

BMW uses a 90-day storage area for the storage of containerized hazardous waste, solid waste, used oil, and universal waste. BMW uses 550 gallon containers (totes) for the storage of hazardous waste purge solvent. The purge solvent is generated in the paint booths and piped to the mix room to a tank. From the tank, the waste purge solvent is pumped to a 550-gallon container located in the mix room. The container, once full, is then transferred to the hazardous waste storage area. At the time of the inspection, there were four 550-gallon containers of hazardous waste purge solvent stored in this area. All of these containers were properly closed, labeled, and dated (see photograph #1).

At the time of the inspection, there were 19 55-gallon containers of waste e-coat filters, windshield solvent, purge solvent, and other plant-generated hazardous waste. These containers were inspected for labeling, aisle space, closure, and dating. No pre-transport deficiencies were noted at the time of the inspection.

At the time of the inspection, the 1,100 gallon used oil storage tank was inspected. The tank was appropriately labeled and closed. No RCRA deficiencies were noted with the used oil tank.

Noted in this storage area were a non-hazardous drum washing unit (discharges to the waste-water treatment plant), non-hazardous drum storage, trash roll-off storage, non-hazardous paint sludge roll-off container storage, one 55-gallon container of contaminated gasoline (destined for a fuel and/or energy recovery), a satellite storage area for aerosol cans, solvent soaked rags (determined by BMW to be non-hazardous), and universal wastes.

At the time of the inspection, a satellite accumulation container which is equipped with a closed draining device fitted to the top of a 55-gallon drum was located in this area. The draining device had either leaked or overflowed to the top of the drum (see photograph #2-3). There was hazardous waste present at the base of the device and on top of the drum. **BMW was operating this facility in violation of SCHWMR R.61-79.262.34(a)(1)(i) and 40 C.F.R. § 262.34(a)(1)(i) for failing to containerize hazardous waste. This violation was corrected during the inspection.**

Totes and other containers of hazardous were being stored within the secondary containment area, as required by SCDHEC large quantity generator regulations. However, at the time of the inspection, there were two 55-gallon containers of hazardous waste which were being stored outside of the secondary containment area. These

containers were stored in an area where the floor was chipped and not properly sealed (see photograph #4). **BMW must repair the floor and/or keep all containers within the secondary containment area with an adequately sealed floor pursuant to SCHWMR R.61-79.265.175(b)(1).**

B. Satellite Accumulation Areas:

Satellite Accumulation areas N-18, M-27, L-29, J-21, P-24, S-15, R-5, and W-4 were inspected. At the time of the inspections, the satellite accumulation containers were being appropriately managed under the satellite accumulation regulations. No deficiencies were noted in these areas.

C. Final Repair Mix Room:

Located in this area were two parts washing units which used purge solvent as the cleaning solvent. Both units recirculated solvent. In addition, there was one 55-gallon satellite accumulation container which contained spent purge solvent. The satellite container was appropriately labeled and closed at the time of the inspection. No RCRA deficiencies were noted in this area.

D. Phosphate Area:

In this process, automobile bodies are conveyed and passed through a phosphate dip and cleaning operation. The Phosphate coating area was inspected. No hazardous waste is generated in this area. No RCRA deficiencies were noted in this area at the time of the inspection.

E. E-Coat Area:

BMW generates E-Coat filters in this area from a body dipping operation. The E-Coat filters are characteristic hazardous waste for lead (D008). At the time of the inspection, there were no waste filters being stored in this area. Housekeeping in this area needs improvement. There was some dried E-Coat residue on the concrete below the system. BMW should immediately remove spills and repair leaks from this system. E-Coat waste on the floor in this area would constitute illegal storage.

F. Paint Building:

The Paint Building consists of a lab, bulk storage room, and paint mix room. The paint

mix room houses various paint mixing and distribution vessels and the hazardous waste purge solvent tank. The bulk storage room houses various drums and bulk containers of product and houses the hazardous waste tote.

Hazardous waste purge solvent, generated in the paint booths is pumped from the recirculation tank (described later in this report) to an 80-gallon tank located in the paint mix room (see photograph #5). Once full, this tank pumps hazardous waste purge solvent to a 550-gallon tote located in the bulk storage room (see photograph #6-8).

Pursuant to SCHWMR R.61-79.265, Subpart CC and 40 C.F.R. Part 265, Subpart CC, BMW has vented this tank to a control device. The tank was inspected pursuant to SCHWMR R.61-79.265 Subpart J and 40 C.F.R. Part 265, Subpart J. No Subpart J and Subpart CC violations were noted at the time of the inspection.

The hazardous waste storage tote was inspected pursuant to container management standards. The tote was properly closed, labeled, and dated. No RCRA deficiencies were noted with the tote at the time of the inspection.

Noted at the time of the inspection was liquid in the sump located behind the hazardous waste storage tote (see photograph #7-8). BMW should make a hazardous waste determination for the material in the sumps and improve housekeeping in this area to assure that hazardous waste is not released to or stored in sumps. **BMW is in violation of SCHWMR R.61-79.262.11 and 40 C.F.R. § 262.11 for failing to make a hazardous waste determination for the waste in the sump behind the hazardous waste storage tote.**

Located in the bulk area were two open buckets. One one-gallon bucket contained paint waste. The other bucket was approximately five gallons in capacity and contained paint waste and/or resin. Both containers were removed from the area during the inspection. According to BMW officials, the buckets contained non-hazardous waste and were disposed of in a non-hazardous trash container during the inspection.

A 55-gallon satellite drum was located in this area. This drum is used to collect paint waste. At the time of the inspection, the funnel on top of the drum was open. **BMW was operating this facility in violation of SCHWMR R.61-79.265.173(a) and 40 C.F.R. § 265.173(a) as referenced by SCHWMR R.61-79.262.34(c)(1)(i) and 40 C.F.R. § 262.34(c)(1)(i). As such, BMW was illegally storing hazardous waste. This violation was corrected during the inspection.**

G. Paint and Purge Collection System:

BMW uses an automated painting process where much of the painting is performed by robotic arms. The over-spray from the painting process is captured by a water curtain below a conveyor and grating. The water curtain flows to a wastewater treatment system and is recirculated. Deionized water is used to purge the paint system between color changes for the prime and base coat lines. The purge is expelled directly into the water curtain below the paint line.

For the clear coat line, solvent purge is run through the paint system to clean the paint guns and to evacuate all existing paint from the lines. Robots discharge paint and purge solvent into a gun box located inside the paint booth. Inside the gun box, the robot's spray nozzle is sprayed with virgin purge solvent. Spent purge solvent flows to the recirculation tank.

Located in the basement of the building is an 80-gallon recirculation tank (see photograph #9-14). This tank receives waste paint and purge solvent from the clear-coat paint line. Once the spent purge solvent enters this tank, it is pumped back to the gun boxes to maintain a constant flow of spent solvent within the purge collection system. The spent solvent entering the gun box does not contact the spray nozzle of the robot. Once the solvent level in the recirculation tank reaches a certain point, the solvent is directed from the tank to the hazardous waste tank located in the Paint Building.

EPA has determined that the used purge solvent is a waste since the used purge solvent is physically removed (i.e., piped) from the spray painting applicator unit and will no longer be used to clean the spray paint applicator. The waste (used purge solvent) that has been removed from the spray paint application unit is then conveyed through the "purge recovery system" to the hazardous waste storage tank. All components of the "purge recovery system" (e.g., purge pot(s), recirculation tanks, associated piping, pumps, valves, connectors, flanges, and other equipment), are subject to the hazardous waste requirements because the "purge recovery system's" sole function is to convey the waste from the spray paint applicator to the hazardous waste storage tank.

Pursuant to SCHWMR R.61-79.265.202 and 40 C.F.R. § 265.202, hazardous waste generators who store hazardous waste in tanks, subject to SCHWMR R.61-79.265, Subpart J and 40 C.F.R. Part 265, Subpart J, are required to comply with SCHWMR R.61-79.265, and 40 C.F.R. Part 265, Subparts J, BB, CC. BMW stores hazardous waste in a tank located in the paint mix room, which is subject to Subpart J. Therefore, Part

265, Subparts J, BB, and CC apply to waste handling equipment between the generation point of the hazardous waste and the paint mix room tank. In this system, the generation point of hazardous waste is at the paint spray applicator within the paint line. SCHWMR R.61-79.265.1050(b) and 40 C.F.R. § 265.1050(b) state that Subpart BB requirements apply to equipment that contains or contacts hazardous wastes with organic concentrations of at least ten percent by weight. BMW manages waste purge solvent which has an organic concentration of at least ten percent by weight.

SCHWMR R.61-79.265.1050(c) and 40 C.F.R. § 265.1050(c) require that each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment. BMW has not marked such equipment. BMW has failed to adhere to a condition for exemption from RCRA § 3005 given in SCHWMR R.61-79.265.1050(c) and 40 C.F.R. § 265.1050(c), as incorporated by SCHWMR R.61-79.262.34(a)(1)(ii) and 40 C.F.R. § 262.34(a)(1)(ii). As such, BMW is illegally storing hazardous waste.

SCHWMR R.61-79.264.1031 and 40 C.F.R. § 264.1031 define "in light liquid service" as a piece of equipment which contains or contacts a waste stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (KPa) at 20°C, the total concentration of the pure organic opponents having a pressure greater than 0.3 KPa at 20° C is equal to or greater than 20% by weight, and the fluid is a liquid at operating conditions. BMW's purge solvent has a vapor pressure of 2.13 KPa. Thus, the equipment associated with the waste purge solvent would be "in light liquid service." SCHWMR R.61-79.265.1052 and 40 C.F.R. § 265.1052 require that each pump in light liquid service be monitored monthly to detect leaks by the methods specified in SCHWMR R.61-79.265.1063(d-f) and 40 C.F.R. § 265.1063(d-f). BMW is currently not monitoring pumps in light liquid service for the purge waste system.

BMW has failed to adhere to a condition for exemption from RCRA § 3005 given in SCHWMR R.61-79.265.1052 and 40 C.F.R. § 265.1052, as incorporated by SCHWMR R.61-79.262.34(c)(1)(ii) and C.F.R. § 262.34(c)(1)(ii). As such, BMW is illegally storing hazardous waste.

SCHWMR R.61-79.265.1064(a)(1) and 40 C.F.R. § 265.1064(a)(1) require that each owner or operator subject to this subpart comply with the record keeping requirements of this section. SCHWMR R.61-79.265.1064(b) and 40 C.F.R. § 265.1064(b) require that owners and operators record for each piece of equipment: equipment identification number, hazardous waste management unit identification, approximate location of each unit, type of equipment, percent-by-weight total organics in the hazardous waste stream,

hazardous waste state at the equipment, and method of compliance with the standard. At the time of the inspection, BMW had not complied with any of the requirements of this section.

BMW has failed to adhere to a condition for exemption from RCRA § 3005 given in SCHWMR R.61-79.265.1064 and 40 C.F.R. § 265.1064, as incorporated by SCHWMR R.61-79.262.34(a)(1)(ii) and 40 C.F.R. § 262.34(a)(1)(ii). As such, BMW is illegally storing hazardous waste.

Pursuant to SCHWMR R.61-79.260.10 and 40 C.F.R. § 260.10, a tank system is defined as "a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system." Pursuant to SCHWMR R.61-79.260.10 and 40 C.F.R. § 260.10, ancillary equipment is defined as "any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site."

Pursuant to SCHWMR R.61-79.265.190 and 40 C.F.R. § 265.190, the requirements of Subpart J apply to owners and operators of facilities that use tank systems for the storage and treatment of hazardous waste except under certain conditions.

Pursuant to SCHWMR R.61-79.265.191(a) and 40 C.F.R. § 265.191(a), an owner or operator must obtain and keep on file a written assessment reviewed and certified by an independent qualified registered professional engineer in accordance with SCHWMR R.61-79.270.10(d) and 40 C.F.R. § 270.11(d) that attest to the integrity of the tank. At the time of the inspection, BMW had not obtained an assessment of the complete tank system pursuant to this regulation.

BMW has therefore failed to adhere to a condition for exemption from RCRA § 3005 given in SCHWMR R.61-79.265.191(a) and 40 C.F.R. § 265.191(a), as incorporated by SCHWMR R.61-79.262.34(a)(1)(ii) and 40 C.F.R. § 262.34(a)(1)(ii). As such, BMW is illegally storing hazardous waste.

Pursuant SCHWMR R.61-79.265.193 and 40 C.F.R. § 265.193, an owner or operator must provide secondary containment that meets the requirements of SCHWMR R.61-79.265.193 and 40 C.F.R. § 265.193 so as to prevent the release of hazardous waste or hazardous constituents to the environment. BMW has not demonstrated secondary containment for its hazardous waste purge piping system.

BMW has therefore failed to adhere to a condition for exemption from RCRA § 3005 given in SCHWMR R.61-79.265.193(a) and 40 C.F.R. § 265.193(a), as incorporated by SCHWMR R.61-79.262.34(a)(1)(ii) and 40 C.F.R. § 262.34(a)(1)(ii). As such, BMW is illegally storing hazardous waste.

Pursuant to SCHWMR R.61-79.265(a) and (c) and 40 C.F.R. § 265.195(a) and (c), the owner or operator must inspect, where present, at least once each operating day, the tank system, including secondary containment. These inspections must be documented in the operating record. BMW is performing daily inspections on the hazardous waste storage tank in the paint mix room, but BMW has not documented that inspections are being conducted of the entire tank system.

BMW has therefore failed to adhere to a condition for exemption from RCRA § 3005 given in SCHWMR R.61-79.265.195 and 40 CFR § 265.195, as incorporated by SCHWMR R.61-79.262.34(a)(1)(ii) and 40 C.F.R. § 262.34(a)(1)(ii). As such, BMW is illegally storing hazardous waste.

H. File and Record Review:

Hazardous Waste Storage Area Inspections - During the inspection, inspection logs of the 90-day storage areas for 1999 through 2001 were reviewed (Paint Mix Room, Storage Pad, R.S., L-29, ICP, and T-8). The following deficiencies were noted:

* Weekly inspection records were missing for the time period of 05/21/99 to 07/30/99.
* A weekly inspection record was missing for the weeks of 07/27/00 and 01/05/00.
* A deficiency was noted in the 08/13/99 inspection log and there was no resolution noted.
* A deficiency was noted in the 01/10/00 inspection log and there was no resolution noted.
* The weekly inspection log for 01/05/99 was incomplete.
* For the inspections conducted in 2000 and 2001, there was not a notation documenting the time in which the inspection was conducted.
* For the weeks of 01/21/99 and 01/28/99 the inspection logs listed radio/phone equipment as "N/A."

SCHWMR R.61-79.265.15(d) requires that the owner or operator record inspections in an inspection log. At a minimum, the records must include the date and the time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or remedial actions. BMW has failed to

comply with the requirements listed above for the said dates listed above. BMW is in violation of SCHWMR R.61-79.265.15(d) and as incorporated by SCHWMR R.61-79.262.34(a)(1)(ii).

Hazardous Waste Storage Tank Inspections - Inspection records for the hazardous waste storage tank were reviewed for 1999 through 2001. At the time of the inspection, BMW was unable to produce inspection records for 04/13/01, 01/15/01, 09/04/00, and 08/05/00. Inspections were not being conducted on weekends or holidays.

Pursuant to SCHWMR R.61-79.265.195 and 40 C.F.R. § 265.195, the owner or operator must inspect, where present, at least once operating day, the hazardous waste tank system, as described in this regulation. EPA and SCDHEC consider an operating day to be any day in which there is hazardous waste being stored in the tank. **BMW has failed to comply with the requirements listed above for the dates listed above. BMW has therefore failed to adhere to a condition for exemption from RCRA § 3005 given in SCHWMR R.61-79.265.195 and 40 C.F.R. § 265.195, as incorporated by SCHWMR R.61-79.262.34(a)(1)(ii) and 40 C.F.R. § 262.34(a)(1)(ii). As such, BMW is illegally storing hazardous waste.**

Waste Profiles - During the inspection, EPA and SCDHEC reviewed waste profiles for the following waste streams that BMW has determined to be non-hazardous:

PVC paint
Paint sludge from the Waste Water Treatment System
Wax sludge
Ethylene glycol and water mixture
Kerosine, wax, and water mixture
PVC purge
Solvent rags
Paint waste sludge

Of these waste stream profiles reviewed, an analytical result of sampling conducted on water-born paint waste revealed that the sample had a flash point of 130° F (See Attachment B). A waste with a flash point of below 140° F is the point in which a solid waste exhibits the characteristic for ignitability. Pursuant to SCHWMR R.61-79.261.21 and 40 C.F.R. § 261.21, BMW should have characterized this waste as a hazardous waste D001. It is unknown at this time as to how many shipments of this material were made based on this incorrect waste determination. It did appear that at least one shipment of this waste (9,245 lbs) was improperly characterized on Manifest #00032, dated 07/27/00 (See Attachment B). On this manifest, this waste steam was shipped off-site to a permitted treatment storage and disposal facility (TSD), but did not have a hazardous waste code and did not have a corresponding Land Disposal Restriction (LDR) form.

EPA will seek additional information regarding the handling of this waste as a non-hazardous waste. The results of this information will be documented as an addendum to this report.

BMW is in violation of SCHWMR R.61-79.262.21(a) and 40 C.F.R. § 262.21(a) for failing to acquire a manifest for this shipment of hazardous waste. BMW is also in violation of SCHWMR R.61-79.268.7(a)(3), R.61-79.268.7(a)(8), and 40 C.F.R. §§ 268.7(a)(3), 268.7(a)(8) for failing to comply with the LDR requirements outlined in this regulation.

Contingency Plan - The Contingency Plan was reviewed during the inspection and found to be adequate.

Manifests - Manifests were reviewed for shipments made from 1999 to July, 2000. BMW's compliance with manifest requirements and land disposal restriction requirements can not be determined until more information is obtained regarding the shipments of waste paint. Aside from this issue, no RCRA violations were noted with the manifests as the time of the inspection.

Quarterly Report - Noted at the time of the inspection was an inaccuracy in the SCDHEC Quarterly Report, Form 1963 Specifically, Manifest #00042 reflected 580 lbs of D008 shipped off-site. The Quarterly Report listed that the shipment as 850 lbs. **This is a violation of SCHWMR R.61-79.262.41(a)(6).**

10. Signed:

Larry L. Lamberth
Environmental Engineer

07/06/01
Date

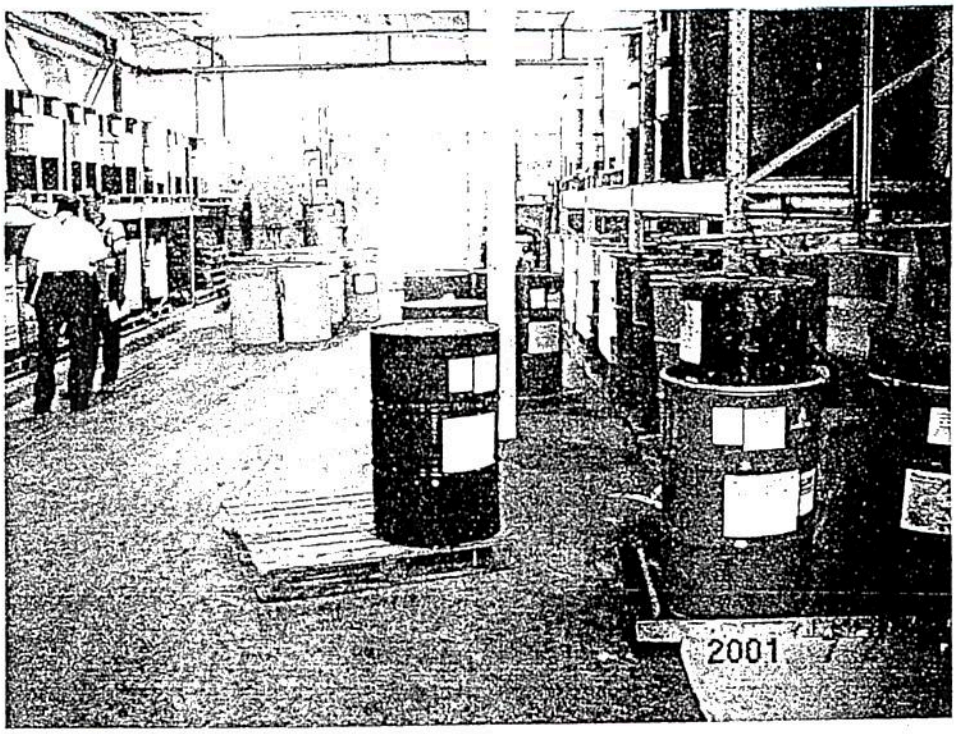
11. Concurrence:

Kenneth R. Lapierre, Chief
North Enforcement and Compliance Section
RCRA Enforcement and Compliance Branch

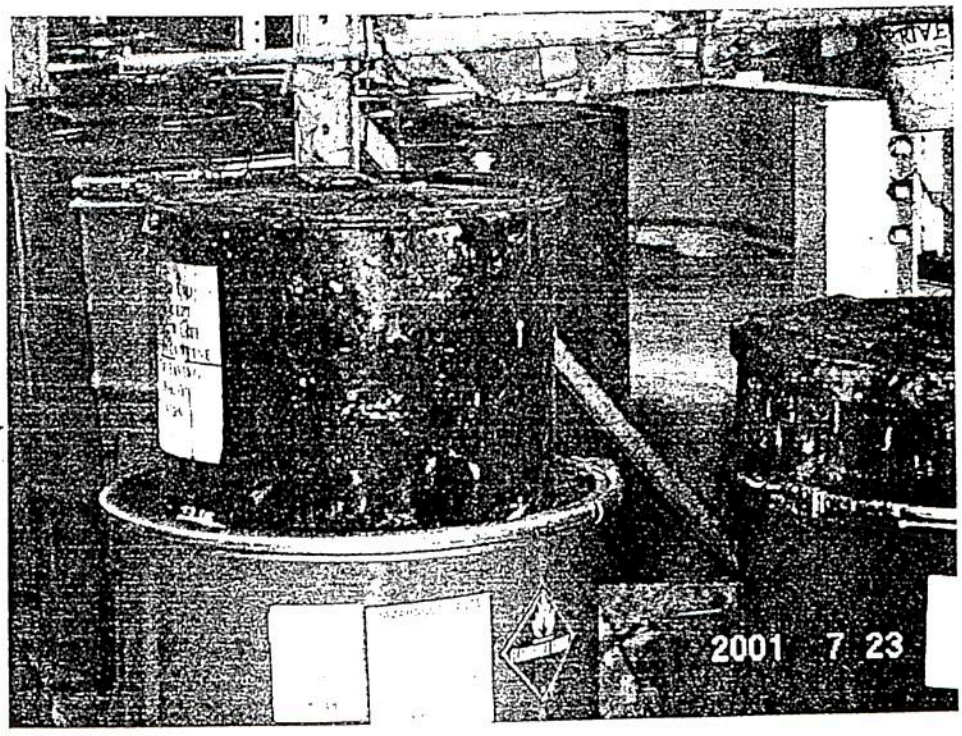
9/17/01
Date

Attachment A

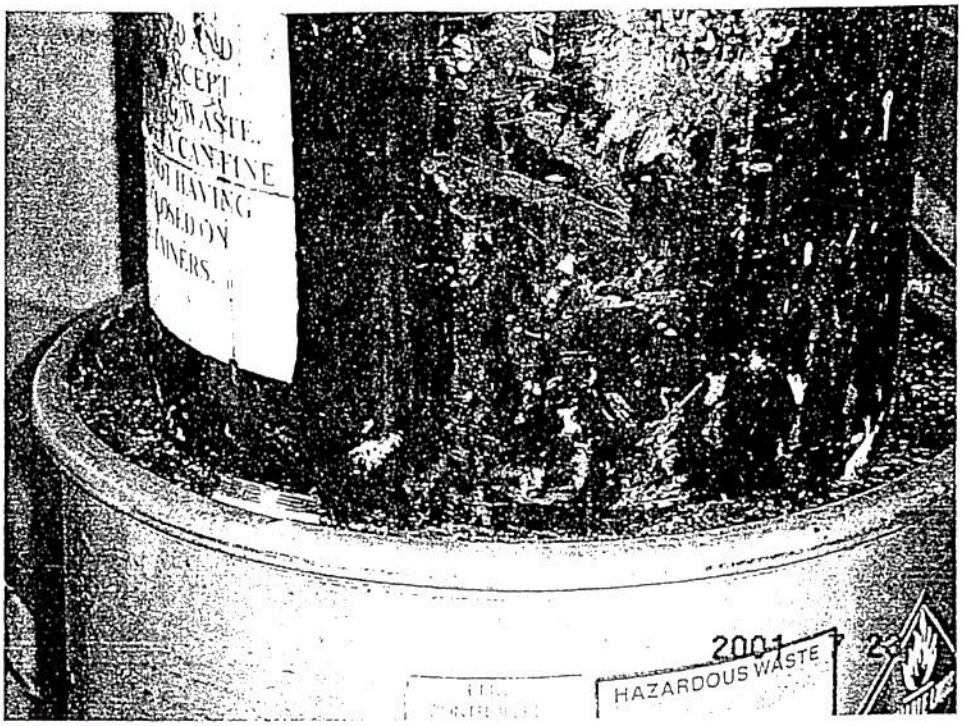
Photographs



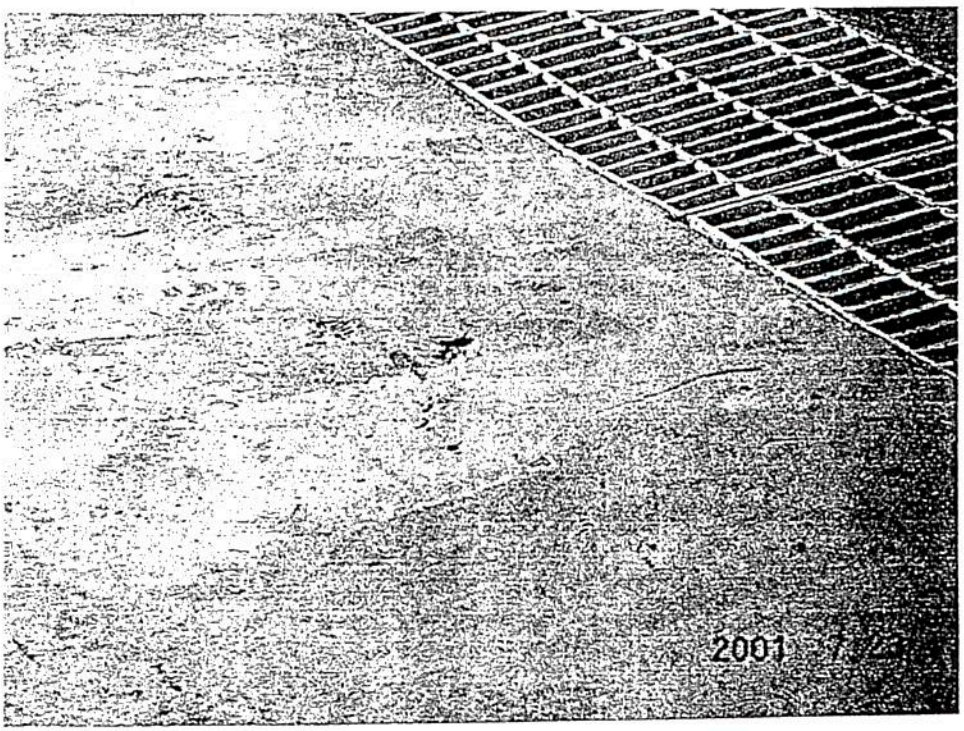
1. 90-Day Storage Area.



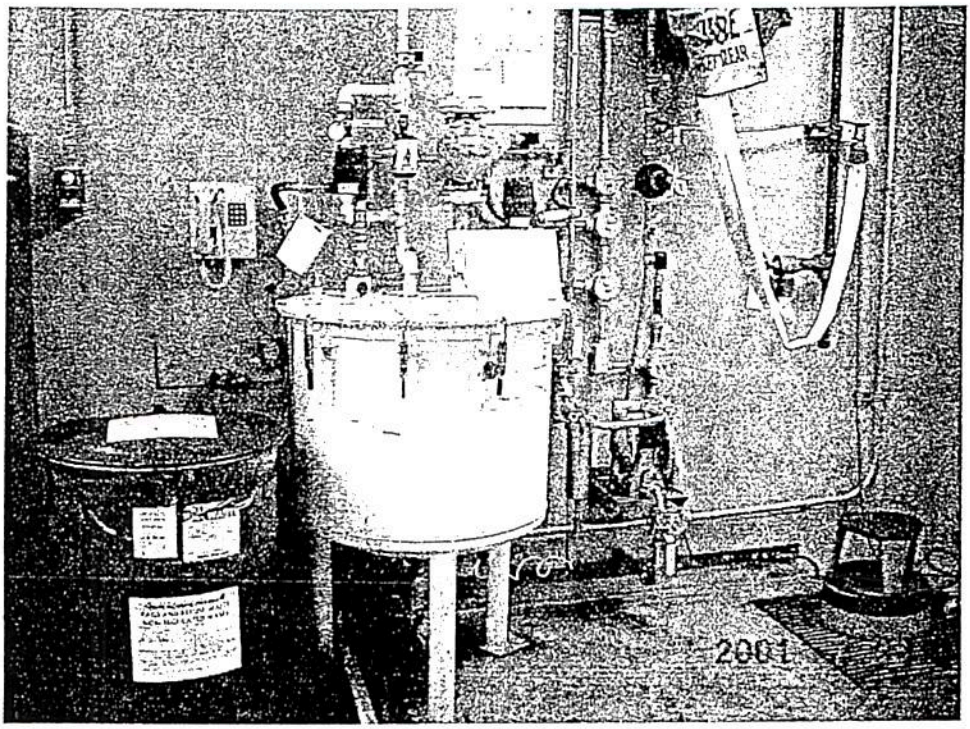
2. Satellite accumulation container located in the 90-Day Hazardous Waste Storage Area.



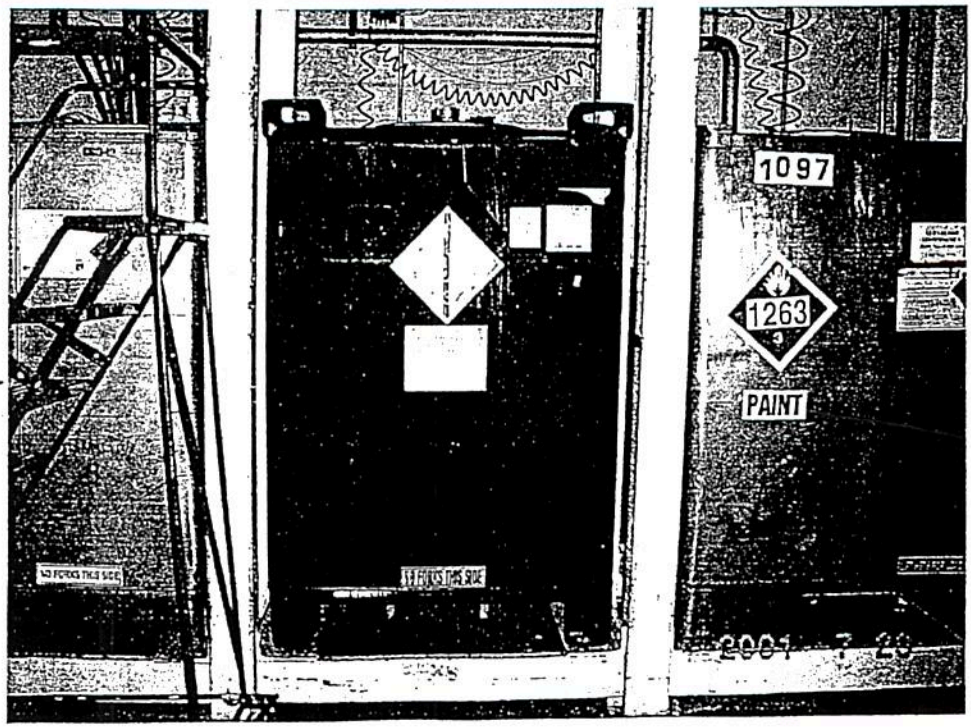
3. Detail of previous photograph.



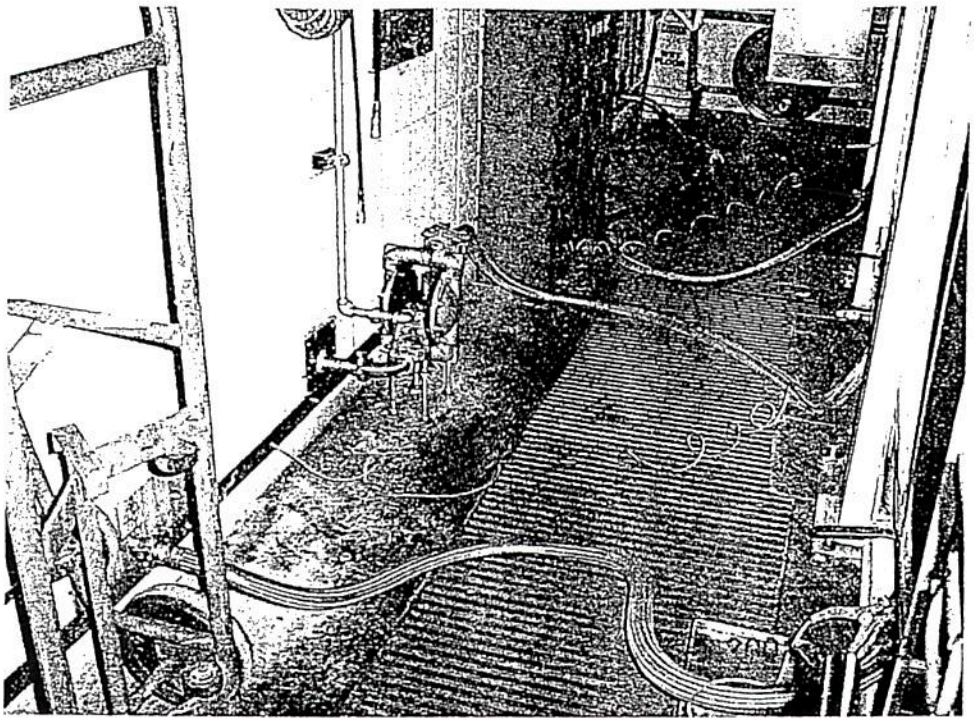
4. Damaged floor in the 90-Day Storage Area.



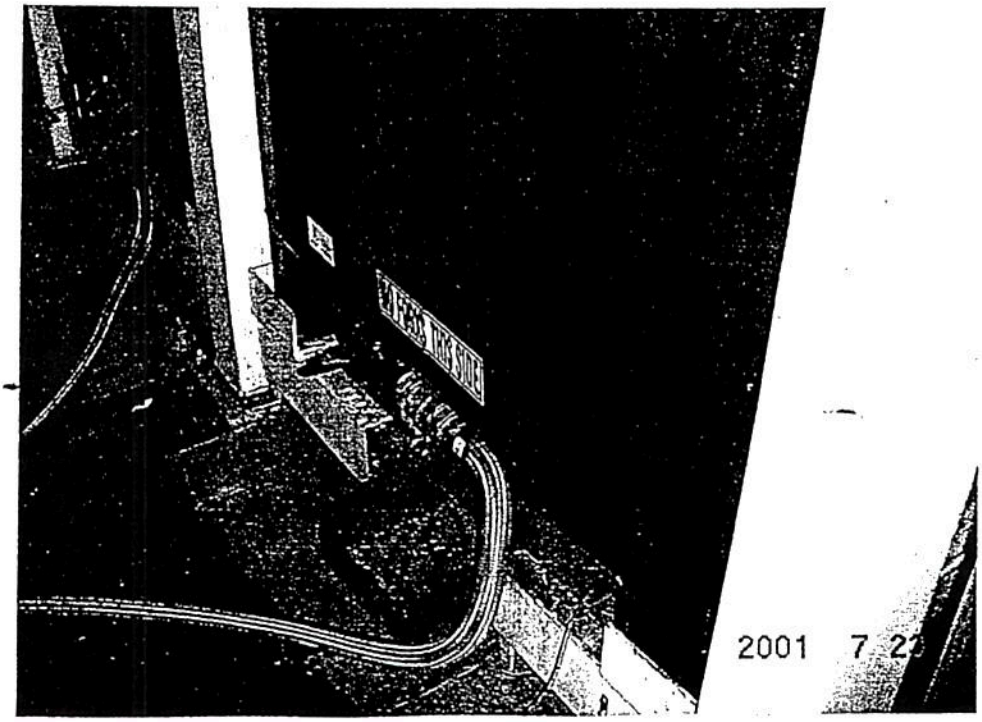
5. Hazardous waste storage tank located in the Paint Mix Room.



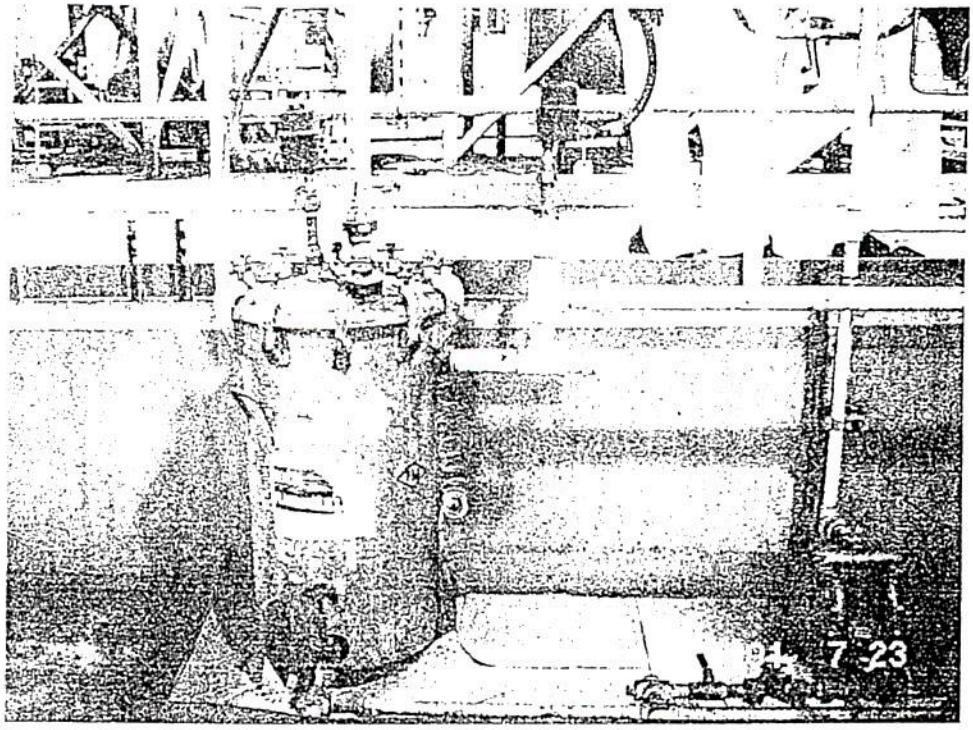
6. Hazardous waste storage containers located in the Paint Mix Room.



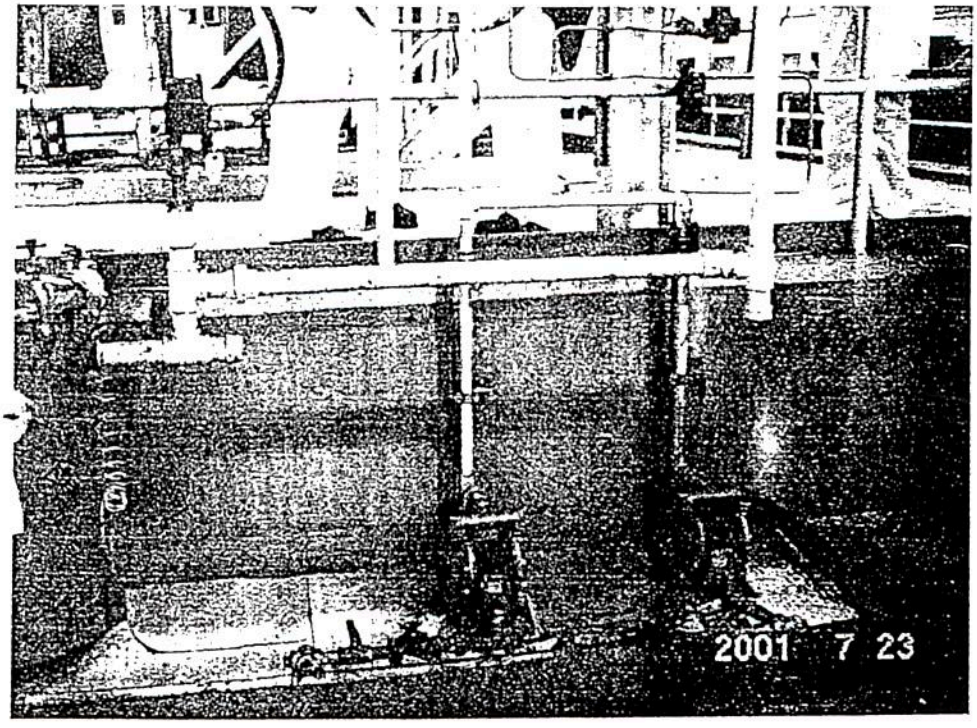
7. Piping from the hazardous waste storage tank to the hazardous waste storage container (Paint Mix Room).



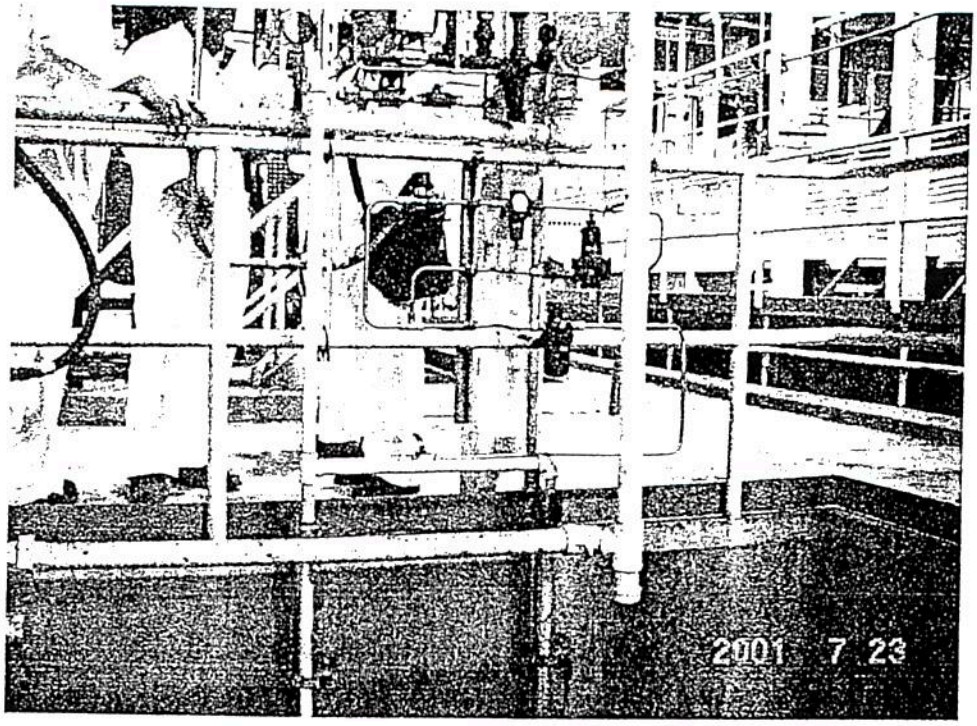
8. Piping at base of the hazardous waste storage container (Paint Mix Room).



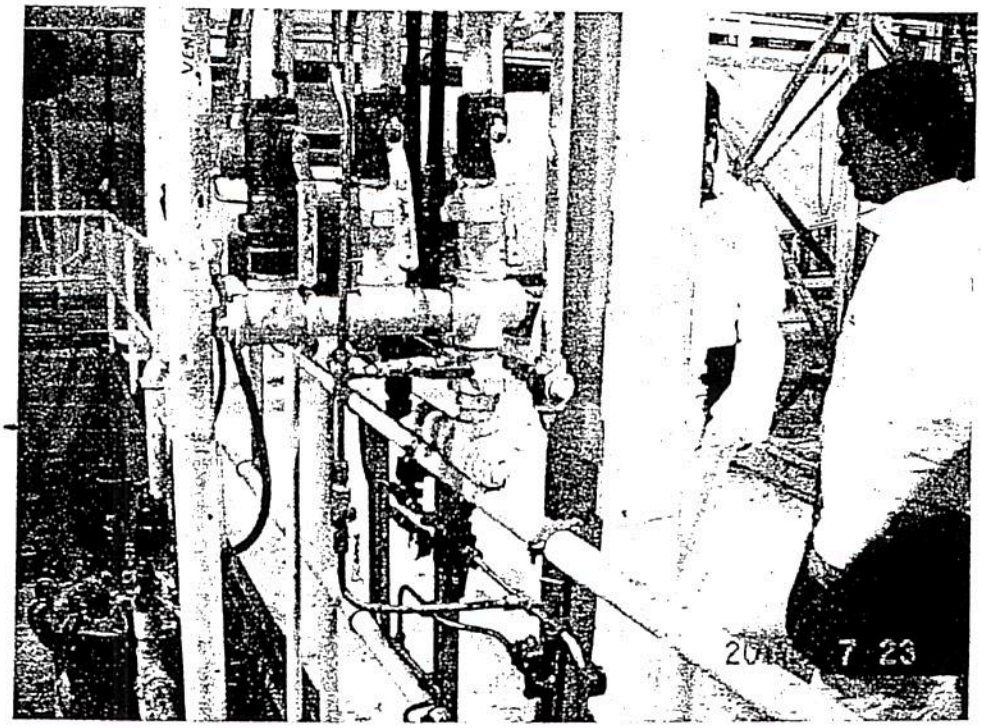
9. Purge collection tank located in the basement.



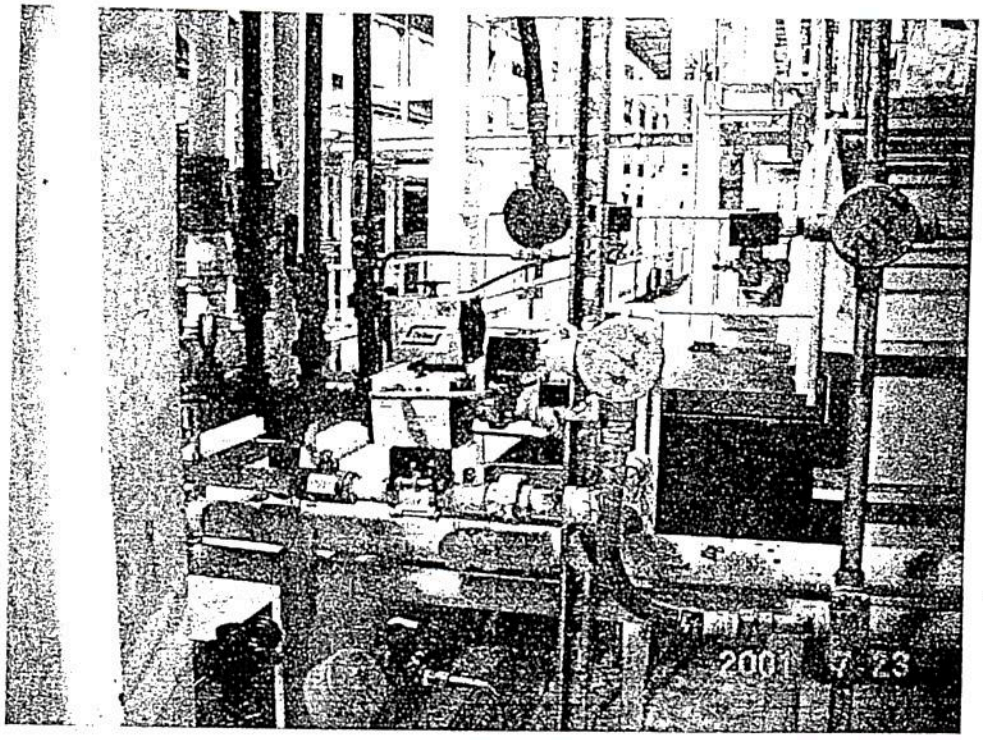
10. Purge collection system piping.



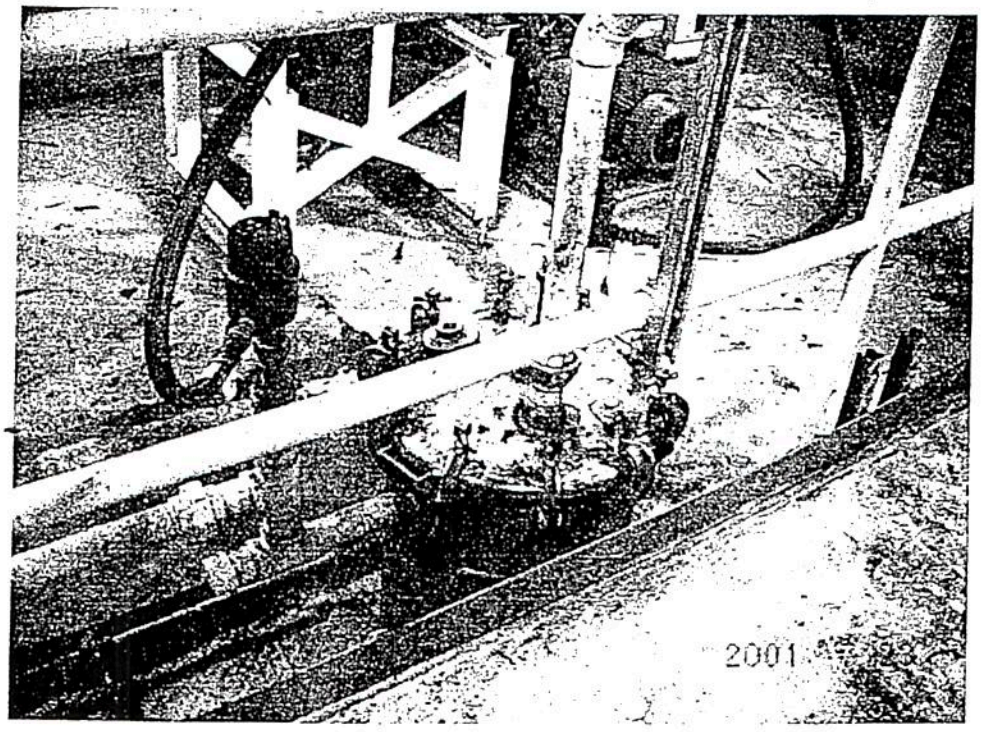
11. Purge collection system piping.



12. Purge collection system piping.



13. Purge collection system piping.



14. Purge collection system piping.

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 896-4000
Emergency & Holidays: (803) 253-6488

13087 PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter) Form Approved. OMB No. 2050-0039 Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. SC0080110288 — Manifest Document No. 0000132

2. Page 1 of 1 — Information in the shaded areas is not r quired by Federal law, but is by State la

3. Generator's Name and Mailing Address
B M W MANUFACTURING
1400 HWY 101 SOUTH PO BOX 11089
SPARTANBURG, SC 29304

4. Generator's Phone (864-980-5764

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: METROPOLITAN ENVIRONMENTAL INC

6. U.S. EPA ID Number: INT190010397

C. State Transporter's ID

D. Transporter's Phone 419-586-6638

7. Transporter 2 Company Name

8. U.S. EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
SOUTHEASTERN CHEMICAL
755 INDUSTRIAL BLVD.
SUMTER, SC 29150

10. U.S. EPA ID Number: SCD003275626

G. State Facility's ID

H. Facility's Phone 803-773-1400

11. U.S. Dot Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numb
a. WASTE ISOPROPANOL, 3, UN1219, PGII	003	DM	01149	P	D001
b. HAZARDOUS WASTE, SOLID, N.O.S. (LEAD), 9, NA3077, PGIII	002	DM	00799	P	D008
c. WASTE FLAMMABLE LIQUID, N.O.S. (XYLENE, METHYL ISOBUTYL KETONE), 3, UN1993, PGII	011	DM	03599	P	F005 F003
d. WASTE ETHYL ALCOHOL, 3, UN1170, PGII D001	008	DM	01145	P	D001

J. Additional Descriptions for Materials Listed Above
A. SE-16462-D001
B. SE-30639-D008
C. SE-17268-F005
D. SE-22011-D001

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CHEMTREC EMERGENCY NUMBER 1-800-424-9300
If unable to reach, contact generator

Public reporting burden for this collection of information is est average 37 minutes for generators, 15 minutes for transporters minutes for treatment storage and disposal facilities. This inclu for reviewing instructions, gathering data, and completing and the form. Send comments regarding the burden estimate, inclu gestions for reducing this burden, to Chief Information Policy PM-223, U.S. Environmental Protection Agency, 401 M St. S W ington, D.C. 20460, and to the Office of Information and R Affairs, Office of Management and Budget, Washington, D.C.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are cla packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulatio the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be econo practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste mana method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name | Signature | Month Day

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Type Name | Signature | Month Day

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day

FACILITY

19. Discrepancy Indication Space
a ____ lbs. c ____
b ____ lbs. d ____

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

South Carolina Department of Health and Environmental Control

ase print or type. (Form designed for use on elite [12-pitch] typewriter)

Form approved OMB No. 2050-0039. Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator's U.S. EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal Law, but is by State Law.
SC000071028	00032	2 / 2	

23. Generator's Name: BMW MANUFACTURING — 1400 HWY 101 South, SPARTANBURG SC 29304 — (864) 968-5964

L. State Manifest Document Number

M. State Generator's ID

24. Transporter _____ Company Name — 25. U.S. EPA ID Number

N. State Transporter's ID

26. Transporter _____ Company Name — 27. U.S. EPA ID Number

O. Transporter's Phone

P. State Transporter's ID

Q. Transporter's Phone

28. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a. WASTE FLAMMABLE LIQUID, N.O.S., (GASOLINE, ETHANOL), 3, UN 1993, PG II (D001, D018)	010	DM	02929	P	D001 / D018
b. NON HAZARDOUS PER 49 CFR (RAGS, 1-CHLOROMETHYL XYLENE, PAINT)	033	DM	07376	P	NREG
c. NON REGULATED (WATER BASE PAINT)	023	DM	09245	P	NREG
d. NON HAZARDOUS PER 49 CFR (WAX, OIL, SEALERS, KEROSENE, XYLENE, GLYCOL ETHER)	003	DM	01322	P	NREG
NON REGULATED (PVC RUBBER)	003	DM	01851	P	NREG
NON REGULATED (ETHYLENE GLYCOL, WATER)	005	DM	02369	P	NREG
NON REGULATED (WAX, SLUDGE)	003	DM	01050	P	NREG
NON HAZARDOUS PER 49 CFR (WAX, OIL, SEALERS, KEROSENE, XYLENE, GLYCOL ETHER) Not Shipped	X	X	X	X	NREG
NON Regulated (WAX + Sludge)	001	CF	01130	P	NREG

Additional Descriptions for Materials Listed Above

a SE 27542 D091 d SE 25834 7777 g SE 22013 7777
b SE 25823 7777 e SE 26272 7777 h SE 25834 7777
c SE 20273 7777 f SE 22012 7777 i SE 22913 7777

T. Handling Codes for Wastes Listed Above

Special Handling Instructions and Additional Information

h. Not Shipped

Transporter _____ Acknowledgement of Receipt of Materials

nted/Typed Name _____ Signature _____ Date: Month Day Year 07 17 08

Transporter _____ Acknowledgement of Receipt of Materials

nted/Typed Name _____ Signature _____ Date: Month Day Year

Discrepancy Indication Space

a _____ lbs. d _____ lbs. g _____ lbs.
b _____ lbs. e _____ lbs. h _____ lbs.
c _____ lbs. f _____ lbs. i _____ lbs.

m 8700-22A (9/88) Previous editions are obsolete (DHEC #1988A) (Rev. 6/97)

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 00-A849
Sample ID: 4-7 WB PAINT

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method

ND = Not detected at the report limit.

TCLP prepartion follows method 1311, SW-846 Revision 3.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
Formaldehyde	5.0 gm	1.0 ml	1/ 7/00	C. Terry	8315

Report Approved By: T J Duello Report Date: 1/14/00

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 84009

End of Sample Report.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

B. M. W. 5723
BRIGGS HAMILTON
P. O. BOX 1100, DEPT T. S. 16
SPARTANBURG, SC 29304-4100

Project: 991231
Project Name: YEAR END SAMPLES
Sampler: TOM WILKINS

Lab Number: 00-A849
Sample ID: 4-7 WB PAINT
Sample Type: Solid waste
Site ID:

Date Collected: 1/ 1/00
Time Collected: 16:00
Date Received: 1/ 5/00
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDE/PCB's/HERBICIDES										
Formaldehyde	117.	mg/kg	20.0	0.2	100	1/ 7/00	6:07	Noorbakhsh	8315A	758
METALS										
Antimony	ND	mg/kg	9.785	9.785	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Arsenic	ND	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Barium	5264.19	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Beryllium	ND	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Cadmium	ND	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Chromium	66.145	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Copper	270.059	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Lead	ND	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Mercury	ND	mg/kg	0.098	0.098	1	1/ 7/00	7:31	G.McCord	7471	9253
Nickel	6.849	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Silver	ND	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Thallium	ND	mg/kg	0.978	0.978	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Tin	ND	mg/kg	9.785	9.785	1	1/ 7/00	13:02	G.Robinson	6010B	9278
Zinc	90.215	mg/kg	9.785	9.785	1	1/ 7/00	13:02	G.Robinson	6010B	9278
GENERAL CHEMISTRY PARAMETERS										
Flash Point, Closed Cup	FLASHED AT 130					1/ 7/00	10:00	McFarland	1010	454

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Time	Analyst	Method
Barium	< 1.00	mg/l	100	100	1/12/00	7:35	G.Robinson	6010B
TCLP Extraction	Initiated				1/ 7/00	12:00	L.Wilson	1311

Sample report continued . . .